

**REMARKS**

Applicants have carefully considered the Office Action dated November 5, 2004 regarding the above-identified application, and the claim amendments above together with the remarks that follow are presented in a bona fide effort to respond thereto and address all issues raised in that Action.

First, it is noted that the Examiner did not examine the claims elected by Applicants, that is to say claims 5-8. Instead, the Action presented an examination of non-elected claims 1-4, 19 and 20. Having received an Action on the merits with respect to claims 1-4, 19 and 20, it appears that the subject matter of the other original claims (5-18) stands withdrawn, and Applicants must move forward in this case by pursuing the subject matter of the examined claims 1-4, 19 and 20. In that regard, the amendments above revise claim 1 and replace examined claims 2-4 with new claims 21-23, to respond to the art rejection. Applicants have deleted claims 19 and 20.

Although some further language is added, much of the amendment of claim 1 moves recitations from examined dependent claims 2 and 3 up into independent claim 1. For example, claim 1 now specifies the light path changing element and the U-shaped path, which were features originally recited in examined claim 2. Similarly, independent claim 1 now specifies that the radiating device comprises a polarization beam splitter, which is a feature originally recited in examined dependent claim 3. Original claims 2 and 3 both specified the reflection type of the video display element. It is submitted that amended claim 1 is directed to the originally examined subject matter, and since the claims 21-23 depend from 1, claims 21-23 are properly grouped with that claim for purposes of further examination.

Care has been taken to avoid introduction of new matter. The amendments to claim 1 are supported, for example, by Fig. 1 and the discussion thereof running from line 2 of page 12 to

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line 21 of page 13 in the original specification. New claim 21 finds support in the discussion running from line 22 of page 15 to line 12 of page 16 and in Fig. 2. Claims 22 and 23 are supported by in the discussion running from line 11 of page 20 to line 5 of page 22 and Figs. 7A-7C. Prompt favorable reconsideration of this amended application, based on claims 1 and 20-23, is respectfully requested.

The Office Action includes a rejection of claims 1, 3, 19 and 20 under 35 U.S.C. §102(e) over US patent no. 6,204,901 to Knox, and a rejection of claims 2 and 4 under 35 U.S.C. §103 as unpatentable over the same patent.

As an initial matter, it is noted that the accompanying PTO-892 citation form does not list the applied Knox patent. Instead, the form listed US patent no. 6,201,901 to Zhou. The listed 6,201,901 patent by Zhou et al. relates to a border-less, clock free, two-dimensional barcode and a method for printing and reading the barcode, which seem to have little or nothing to do with the issues the Examiner discusses in the Office Action. Apparently, the listing of Zhou on the PTO-892 form and omission of Knox was incorrect. It is respectfully requested that the Examiner list the 6,204,901 to Knox on a PTO-892 citation form and mail that corrected citation to Applicants' representative, with the next official communication regarding this matter.

In response to the art rejections over Knox, Applicants have amended claims to clearly distinguish the claimed subject matter over that patent. An explanation of Applicants' position on patentability of claims 1 and 21-23 over Knox follows.

Knox (U.S. Patent No. 6,204,901) discloses a color shutter that sequentially converts white light into red, green and blue light, which is provided to a transmissive image engine for forming an image of a projection display. The color shutter is formed so as to have entrance

(202) and exit (203) reflecting linear polarizers. The reflecting linear polarizers 202 and 203 function so as to transmit a desired polarized light and reflect any unnecessary polarized light.

Amended claim 1 recites that the polarization converter comprises a polarizing beam splitter and a  $\lambda/2$  phase difference plate. In Knox, the reflecting linear polarizers are only part of an element that comprises a color shutter, where the overall shutter structure provides an optical switching characteristic, that is to say, so as to sequentially output different colors of light. The polarization converter recited in claim 1, that is to say comprising the polarizing beam splitter and the  $\lambda/2$  phase difference plate, does not function so as to reflect an unnecessary polarized light, as do the polarizers of Knox. The polarization converter in the claim functions so as to match light from the source unit to one of two types of polarized light (S or P polarizing light). In an example described in Applicants' specification, P type polarizing light processed through the polarizing beam splitter 4 and the  $\lambda/2$  phase difference plate 4a is changed and emitted as S type polarizing light, whereas S type polarizing light is reflected but not converted and emerges as S polarizing light. In the example, P polarizing light would be undesired, and that light is changed into desired S polarizing light and output together with the originally received desired S polarized light. Light of the undesired P type is matched with desired S type light. Attention is directed to page 12, lines 2-15, of the present application.

It is respectfully submitted that the polarization converter recited in claim 1 does not correspond to a reflecting linear polarizer as in Knox. A linear polarizer as used by Knox does not comprise a combination of a polarizing beam splitter and a  $\lambda/2$  phase difference plate as claimed and a linear polarizer does not match light from the source to one of S polarizing light and P polarizing light as claimed. Hence, the applied Knox patent does not satisfy the independent claim with regard to the polarizing converter. It is submitted that use of such a

converter in Knox would not have been obvious. Hence, both the anticipation rejection and the obviousness rejection should not apply to amended claim 1, or to any of the claims that depend from it.

Also, claim 1 now specifies a light path changing element, to change the light path by substantially 90°, and that the light path from the light source unit to the projector is U-shaped. Claim 21 adds that the radiating device comprising the polarizing beam splitter also changes the light path by substantially 90°. Knox does not disclose nor suggest a U-shaped light path, nor either of the 90° changes recited in claim 1 and claim 21. For this additional reason, Knox does not anticipate either of these claims.

Furthermore, Knox does not disclose the reflection-type optical characteristics switching element of claim 21, which has the combined function of the light path changing (outputting light in a different direction) and switching the wavelength band of the outputted light. Even if some light direction changing is known, as asserted in the obviousness rejection, it is respectfully submitted that general knowledge of changing light direction would not have lead one skilled in the art to use a radiating element that performs both the light path changing and the switching of the wavelength band of claim 21, in the specific context of the Knox color shutter. Hence, the subject matter of claim 21 further distinguishes in a patentable manner over Knox.

Also, Knox does not disclose the optical characteristics switching element of claim 22 which has areas that are switched to radiate different colors of light to different areas of the video display. For example, at the same time axis, the R-light is radiated at the top area of the liquid crystal panel, the G-light is radiated at the center area, and the B-light is radiated at the bottom area, as shown in Fig. 7B of the present application. Knox also does not disclose the optical characteristics switching element of claim 23 that moves (scrolls) the areas of radiation with the

different color lights sequentially in a predetermined direction. These further distinctions over Knox, provide additional grounds for the conclusion that new claims 22 and 23 are novel and patentable over that applied patent.

For the reasons discussed above, claims 1 and 21-23 are novel and unobvious over Knox. It is respectfully submitted that the art rejections should be withdrawn with respect to those claims.

Upon entry of the above claim amendments, claims 1, 5-18 and 21-23 should be pending in this application, although claims 5-18 stand withdrawn from further consideration. Hence, claims 1 and 21-23 are presented for reconsideration, and all of those claims should be patentable over the art applied in the Action. Accordingly, this case should now be ready to pass to issue; and Applicants respectfully request a prompt favorable reconsideration of this matter.

It is believed that this response addresses all issues raised in the November 5, 2004 Office Action. However, if any further issue should arise that may be addressed in an interview or an Examiner's amendment, it is requested that the Examiner telephone Applicants' representative at the number shown below.

To the extent necessary, if any, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Keith E. George  
Registration No. 34,111

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8603 KEG:apr  
Facsimile: 202.756.8087  
**Date: February 7, 2005**

**Please recognize our Customer No. 20277  
as our correspondence address.**